

OIL AND GAS DOCKET NO. 3-98,173

THE APPLICATION OF TEXACO E&P, INC. FOR TEMPORARY FIELD RULES FOR THE LYONS (GEORGETOWN) FIELD, BURLESON COUNTY, TEXAS.

# **EXAMINER'S REPORT AND RECOMMENDATION**

#### **APPEARANCES:**

#### REPRESENTING

Ms. Sandra Bolz Buch, Attorney

Texaco E&P, Inc.

Mr. Joseph F. Smith, Jr., Unitization Manager

Mr. Alvin Schuchert, Geologist

### PROCEDURAL HISTORY

Application Filed:

June 1, 1992

Notice of Hearing Issued:

June 4, 1992

Hearing Date:

July 1, 1992

Examiner:

July 1, 1992

Doug O. Johnson, P.E.

#### STATEMENT OF THE CASE

This is the unprotested application of Texaco E&P, Inc. to consider adopting special field rules to temporarily regulate the drilling and operation of wells in the Lyons (Georgetown) Field. The rules proposed are briefly summarized as follows:

Rule 1:

(Spacing) - 467' lease line and 1,200' between wells spacing.

Rule 2:

(Density Provisions) - 320 acre gas proration units with a maximum

diagonal of 6,500'. Tolerance assignment of 10% per well.

Rule 3:

(Allocation formula) - 100% acreage.

Rule 4:

(Designated Interval) - The correlative interval of 9,940' to a total depth

of 10,133' as indicated on the Dual Induction - SFL Log of the Getty Oil

Co. (now Texaco E&P, Inc.) R.B. Lewis No. 1 Well.

### **DISCUSSION OF THE EVIDENCE**

The Lyons (Georgetown) Field was discovered at an approximate depth of 9,945' in July 1990. Currently, there are two vertical and three horizontal gas wells in the field. The horizontal wells are recent completions and are the reason Texaco seeks the subject rules. Adopting the proposed 320 acre standard drilling and proration units, in conjunction with Statewide Rule 86, will enable operators to assign acreage commensurate with a horizontal well's capability to drain the formation.

The Georgetown formation underlies the Buda and Austin Chalk. All three formations are naturally fractured carbonates conducive to optimal development through horizontal drilling.

There are other separately recognized gas fields in the area like the Iola (Georgetown) Field and Clay, N.E. (Georgetown) Field that are currently regulated with 320 acre units.

Average reservoir rock and fluid characteristics submitted in support of volumetric reserve and equivalent drainage area calculations are as follows:

porosity	2.0%
net pay	195'
water saturation	56%
gas gravity	0.755
initial conditions	3,939 psia @ 238° F
initial gas formation	_
volume factor	0.813 RB/MCF

Cumulative production from the existing vertical completions has been approximately 984 MMCFG and 32 MBC. One well, the Giesenschlag "C" No. 1 has produced almost 70% of the gas. It's calculated equivalent drainage area based on an estimated ultimate recovery of 784 MMCF is 329 acres.

Texaco demonstrated that without the requested field rules, operators would not be able to assign sufficient acreage to prevent over development. Two recent horizontal completions would earn a maximum of 160 and 220 acres based on drainhole lengths of 3,050' and 4,902', respectively. Whereas, with the proposed rules those same wells will qualify for 480 and 560 acres.

### **FINDINGS OF FACT**

- 1. Notice of the hearing was issued to all operators in the field and all mineral owners offsetting the discovery tract on June 4, 1992.
- 2. The Lyons (Georgetown) Field is a naturally fractured carbonate gas field which is conducive to optimal development through horizontal drilling.
- 3. Vertical wells can reasonably be expected to ultimately produce all the recoverable gas from 320 acres.

- 4. Horizontal wells will typically drain proportionately more area than a vertical well depending on the length of the drainhole and number of fracture systems intersected.
- 5. Adopting 320 acre standard drilling and proration units will prevent the drilling of unnecessary wells.

# **CONCLUSIONS OF LAW**

- 1. Proper notice was timely issued to all persons legally entitled to notice.
- 2. All things have occurred and have been done to give the Commission jurisdiction in this matter.
- 3. Adopting the proposed temporary rules is necessary to prevent waste, promote conservation and protect correlative rights.

# **EXAMINER'S RECOMMENDATION**

Based on the foregoing, the examiner recommends that the application be approved.

Respectfully submitted,

Doug O. Johnson, P.E.

Technical/Hearings Examiner

DOJ:as

Date of Commission Action:

1992